Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Telesat Canada	)	
	)	File Nos.
Request to Eliminate Conditions	)	SAT-PDR-20000428-00096
On ANIK E1 and E2's Inclusion on	)	SAT-AMD-20010216-00013
The Permitted Space Station List	)	

ORDER

Adopted: August 30, 2001 Released: August 31, 2001

By the Deputy Chief, Satellite and Radiocommunication Division, International Bureau:

I. INTRODUCTION

1. In this Order, we remove the conditions on the Permitted Space Station List (Permitted List) that require Telesat Canada's (Telesat's) ANIK E1 and ANIK E2 satellites to operate on a non-interference basis with respect to other satellites authorized to serve the United States and that meet the Commission's technical requirements.[1] We also update the Permitted List to reflect Telesat's relocation of ANIK E1 from the 111.1º W.L. orbit location to the 118.7° W.L. orbit location, and its relocation of ANIK E2 from 107.3º W.L. to 111.1º W.L. The Permitted List denotes all satellites with which U.S. earth stations with routinely authorized technical parameters are permitted to communicate without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' licenses. Because Telesat has demonstrated that it can operate in accordance with the Commission's technical rules and has coordinated its operations with adjacent satellites at the new locations, it is no longer necessary to impose a "non-interference" condition on ANIK E1's and ANIK E2's operations. As a result of these actions, U.S. earth stations will be able to communicate with ANIK E1 and E2 at their new locations throughout their license terms on the same basis that they do with other satellites that meet the Commission's technical rules. This should further stimulate competition in the United States.

[1] *See* 47 C.F.R. Part 25. Under these conditions, U.S. earth stations communicating with ANIK E1 and E2 are prohibited from causing harmful interference to authorized satellite systems that comply with Part 25 of the Commission's rules, and must accept harmful interference from those satellite systems. Telesat Canada, Request for Declaratory Ruling or Petition for Waiver on Earth Stations' Use of ANIK E1 and ANIK E2 Satellite Capacity to Provide Basic Telecommunications Service in the United States, Order, 15 FCC Rcd 3649, 3654-55 (paras. 15-16) (Int'l Bur. 1999) (*First ANIK E1 and E2 Order*).

II. BACKGROUND

A. Procedural History

2. The Commission's *DISCO II Order* adopted a framework under which the Commission would consider requests for non-U.S. satellite systems to serve the United States. To implement this framework, the Commission, among other things, established a procedure by which a service provider in the United States could request immediate access to a foreign in-orbit satellite that would serve the U.S. market.[2] In the *DISCO II First Reconsideration Order*, the Commission streamlined this process. First, it allowed the *operators* of in-orbit non-U.S. satellites offering fixed-satellite service to request authority to provide space segment capacity service to licensed earth stations in the United States. Under *DISCO II*, this request could be made only by an earth station operator. Second, it created the Permitted Space Station List to facilitate access by the foreign satellite. Once a non-U.S. space station is permitted to access the U.S. market pursuant to a complete *DISCO II* analysis, it is placed on the Permitted Space Station List upon the applicant's request. This list includes all satellites with which U.S. earth stations with routinely-authorized technical parameters (known as "ALSAT" earth stations) are permitted to communicate without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' original licenses.[3] The Permitted Space Station List is maintained on our website, and is also available via fax or e-mail.[4]

3. The International Bureau (Bureau) placed ANIK E1 and ANIK E2 on the Permitted List in December 1999.[5] At that time, ANIK E1 and E2 were located at the 111.1º W.L. and 107.3º W.L. orbit locations, respectively.[6] The Bureau found that, although Telesat was not required to submit detailed

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[2] Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, Report and Order, IB Docket No. 96-111, 12 FCC Rcd 24094, 24174 (para. 186) (1997) (*DISCO II*). For a more detailed summary of the *DISCO II* framework, see Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, First Order on Reconsideration, IB Docket No. 96-111, 15 FCC Rcd 7207, 7209-10 (paras. 4-5) (1999) (*DISCO II First Reconsideration Order*).

[3] *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7214-16 (paras. 16-20). "ALSAT" means "all U.S.-licensed space stations." Originally, under an ALSAT earth station license, an earth station operator providing fixed-satellite service in the conventional C- and Ku-bands could access any U.S. satellite without additional Commission action, provided that those communications fall within the same technical parameters and conditions established in the earth stations' licenses. *See DISCO II First Reconsideration Order*, 15 FCC Rcd at 7210-11 (para. 6). The *DISCO II First Reconsideration Order* expanded ALSAT earth station licenses to permitted access to any satellite on the Permitted List. *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

[4] *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7215-16 (para. 19).

[5] *First ANIK E1 and E2 Order*, 15 FCC Rcd 3649.

[6] *First ANIK E1 and E2 Order*, 15 FCC Rcd at 3649 (para. 1).

technical information specified in Section 25.114 of the Commission's Rules,[7] the Bureau could not determine without that information whether these two satellites could operate interference-free in a two-degree spacing environment.[8] Accordingly, the Bureau required ALSAT-designated earth stations communicating with ANIK E1 or ANIK E2 to do so only on a non-harmful interference basis relative to two-degree-compliant satellite systems currently in operation.[9] Furthermore, the Bureau noted that, in the future, it could authorize access to the U.S. market by a satellite that is two-degree-compliant, and is located within two degrees of the ANIK E1 or ANIK E2 satellites. In that event, the Bureau would expect Telesat to coordinate in good faith with the licensee of that satellite. If a coordination agreement is not reached, the Bureau would require the operation of U.S. earth stations communicating with the ANIK E1 or ANIK E2 satellites to be on a non-interference basis relative to U.S. services provided by that future-authorized compliant satellite.[10]

B. Pending Petition

4. On April 28, 2000, Telesat submitted additional technical information for both ANIK E1 and ANIK E2.[11] Telesat also asked the Bureau to remove the non-interference conditions for these two satellites from the Permitted List. Telesat's petition was placed on public notice on June 8, 2000, and no comments were filed. Telesat later confirmed that ANIK E1 and ANIK E2 comply with all Commission technical requirements, including the requirements contained in Section 25.210(i) of the Commission's rules.[12]

5. On February 16, 2001, Telesat informed the Commission of its plans to relocate ANIK E1 from the 111.1º W.L. orbit location to the 118.7° W.L. orbit location, and to relocate ANIK E2 from 107.3º W.L. to 111.1º W.L.[13] Telesat explained that the relocation of these satellites affects their gain contours,

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[7] 47 C.F.R. § 25.114.

[8] *First ANIK E1 and E2 Order*, 15 FCC Rcd at 3654 (para. 15), *citing DISCO II*, 12 FCC Rcd at 24176 (par. 191) (non-U.S. satellite operators are not required to submit technical information for satellites for which international coordination has been completed).

[9] *First ANIK E1 and E2 Order*, 15 FCC Rcd at 3654 (para. 15).

[10] *First ANIK E1 and E2 Order*, 15 FCC Rcd at 3654-55 (para. 16).

[11] Letter from Carl R. Frank, Counsel for Telesat, to Magalie Roman Salas, Secretary, FCC, dated Apr. 28, 2000 (Telesat Petition), Exh. 1 (technical information for ANIK E1), Exh. 2 (technical information for ANIK E2). Telesat submitted the technical information specified in Sections 25.114(c)(5) through (c)(11) of the Commission's rules, which all U.S. space station applicants must supply with their license applications.

[12] Letter from Jennifer D. Hindin, Counsel for Telesat, to Steven Spaeth, Attorney Advisor, International Bureau, FCC (dated Feb. 12, 2001) (*February 12 Letter*). Section 25.210(i) of the Commission's rules, 47 C.F.R. § 25.210(i), requires that space station antennas provide a cross-polarization isolation such that the ratio of the on-polar gain to the cross-polar gain is at least 30 dB within its primary coverage area.

[13] Letter from Jennifer D. Hindin, Counsel for Telesat, to Magalie Roman Salas, Secretary, FCC (dated Feb. 16, 2001) (*February 16 Letter*).

but does not affect any other technical or operational characteristics.[14] Telesat explained further that its existing coordination agreements with adjacent satellite operators permit operation of either ANIK E1 or ANIK E2 at 111.1º W.L.[15] In addition, Telesat stated that it expected to complete coordination of ANIK E1 at 118.7º W.L. with other potentially affected satellite operators shortly.[16] We placed Telesat's *February 16 Letter* on public notice on February 22, 2001, and received no comments.

6. Subsequently, on March 5, 2001, Telesat requested us to grant special temporary authority (STA) to all ALSAT-designated earth stations to communicate with ANIK E1 and ANIK E2 at their new locations on a non-harmful interference basis.[17] We grant-stamped that request on March 8, 2001. This STA expires on September 4, 2001. Telesat notified us on May 29, 2001 that it completed coordination of ANIK E1 at 118.7° W.L. with adjacent U.S. operators Echostar and PanAmSat.[18] Finally, on August 23, 2001, Telesat provided confirmation that the governments of Canada and Mexico have completed coordination of ANIK E1's operations with the Mexican satellite at 116.8° W.L.[19]

III. DISCUSSION

7. We have reviewed the additional technical information submitted by Telesat for ANIK E1 at 118.7º W.L., and for ANIK E2 at 111.1º W.L., including the cross-polarization isolation information

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[14] *February 16 Letter* at 2. Section 25.114(c)(7) requires space station license applicants to provide maps showing the areas covered by each transmit antenna beam and receive antenna beam, and the different gains within each of those areas at 2 dB intervals down to 10 dB below the peak value, and at 5 dB intervals between 10 dB and 20 dB below the peak value. The gain of an antenna is the ratio of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux-density at the same distance. When not specified otherwise, the gain refers to the direction of maximum radiation. 47 C.F.R. § 2.1. In other words, gain refers to an antenna's ability to collect, concentrate, and direct energy in a particular fashion, *i.e.*, a beam. *See* 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Notice of Proposed Rulemaking*, IB Docket No. 00-248, 15 FCC Rcd 25128, 25133 (para. 9) (2000).

[15] *February 16 Letter* at 2 n.5.

[16] *February 16 Letter* at 3 n.6.

[17] Letter from Jennifer D. Hindin, Counsel for Telesat, to Magalie Roman Salas, Secretary, FCC (dated Mar. 5, 2001) (*March 5 Letter*).

[18] Letter from Jennifer D. Hindin, Counsel for Telesat, to Magalie Roman Salas, Secretary, FCC (dated May 29, 2001) (*May 29 Letter*).

[19] *See* Letter from Jennifer D. Hindin, Counsel for Telesat, to Steven Spaeth, Attorney, Satellite and Radiocommunication Division, International Bureau, FCC (dated Aug. 23, 2001) (*August 23 Letter*). *See also* Letter from Chantal Beaumier, Director, Space and International Regulatory Activities, Industry Canada, to Paul D. Bush, Vice President, Corporate Development, Telesat Canada (dated Aug. 20, 2001) (*August 20 Letter*) (attached to *August 23 Letter*).

submitted on February 12, 2001.[20] With this information, we can now determine that ANIK E1 and ANIK E2 comply with the Part 25 requirements necessary to operate in a two-degree spacing environment at their new locations. In addition, coordination of ANIK E1 at 118.7° W.L. has been completed with operators of adjacent satellites that also provide U.S. service, including SatMex at 116.8° W.L., Echostar at 119° W.L. and 121° W.L., and PanAmSat at 123° W.L.[21] Therefore, we modify all ALSAT-designated earth station licenses so that those earth stations may communicate with ANIK E1 and ANIK E2 at the 118.7° W.L. and 111.1° W.L. orbit locations, respectively, pursuant to their earth station licenses. Finally, ALSAT earth station operators are no longer required to communicate with ANIK E1 and ANIK E2 on a non-harmful interference basis.

8. Consequently, we remove the following two conditions from the Permitted List entry for ANIK E1 and ANIK E2:

1. ALSAT-designated earth stations are permitted to communicate with the ANIK E1 [or ANIK E2] satellite to provide service in the United States on a non-interference basis relative to two-degree compliant operations.

2. In the event that the Commission authorizes access to the U.S. market by a satellite that is two-degree-compliant, and is located within two degrees of the ANIK E1 [or ANIK E2] satellite, ALSAT-designated earth stations are permitted to communicate with the ANIK E1 [or ANIK E2] satellite to provide service in the United States, but only on a non-interference basis unless and until Telesat Canada reaches a coordination agreement with that two-degree-compliant satellite system.

IV. ORDERING CLAUSES

9. Accordingly, IT IS ORDERED that, pursuant to Sections 303(r), 308, 309, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 303(r), 308, 309, 310, and Sections 25.121(a) and 25.137(c) of the Commission's rules, 47 C.F.R. §§ 25.121(a), 25.137(c), each earth station with "ALSAT" designated as a point of communication, IS GRANTED authority to provide Fixed Satellite Services (FSS), excluding FSS Direct-to-Home services from the United States, by accessing the ANIK E1 and ANIK E2 satellites, located at the 118.7º W.L. and 111.1º W.L. orbit locations, respectively, subject to the conditions set forth in its earth station license, and the conditions set forth in the *First ANIK E1 and E2 Permitted List Order*, 15 FCC Rcd 3649 (Int'l Bur., 1999), as modified in this Order.

10. IT IS FURTHER ORDERED that the "Permitted Space Station List" entries for the ANIK E1 and ANIK E2 satellites ARE MODIFIED as set forth in this Order.

11. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106,

[20] *See February 16 Letter.*

[21] *See May 29 Letter, August 20 Letter, August 23 Letter.*

1.115, may be filed within 30 days of the date of the release of this Order. (*See* 47 C.F.R. § 1.4(b)(2).)

FEDERAL COMMUNICATIONS COMMISSION

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